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What is claimed is:

1. A multilayer ceramic capacitor comprising internal electrode layers and dielectric layers, wherein an average particle diameter ( $R$ ), in a direction parallel with said internal electrode layers, in dielectric particles constituting said dielectric layers is larger than a thickness ( $d$ ) of said dielectric layer.

2. The multilayer ceramic capacitor as set forth in claim 1, wherein a ratio ( $R/d$ ) between said average particle diameter ( $R$ ) and the thickness ( $d$ ) of said dielectric layer satisfies  $1 < R/d < 3$ .

3. The multilayer ceramic capacitor as set forth in claim 1, wherein a main component of said internal electrode layers is Ni or Cu.

4. The multilayer ceramic capacitor as set forth in claim 2, wherein a main component of said internal electrode layers is Ni or Cu.

5. The multilayer ceramic capacitor as set forth in claim 3, wherein Fe is segregated in said internal electrode layer.

6. The multilayer ceramic capacitor as set forth in claim 4, wherein Fe is segregated in said internal electrode layer.

7. The multilayer ceramic capacitor as set

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(cont)

forth in claim 1, wherein a thickness of said dielectric layer is less than 3 $\mu$ m.

8. The multilayer ceramic capacitor as set forth in claim 2, wherein a thickness of said dielectric layer is less than 3 $\mu$ m.

5 9. The multilayer ceramic capacitor as set forth in claim 3, wherein a thickness of said dielectric layer is less than 3 $\mu$ m.

10 10. The multilayer ceramic capacitor as set forth in claim 1, wherein said dielectric layer comprises at least said dielectric particles and a grain boundary phase, and an area ratio of said grain boundary phase in a section of said dielectric layer is 2% or less.

15 11. The multilayer ceramic capacitor as set forth in claim 2, wherein said dielectric layer comprises at least said dielectric particles and a grain boundary phase, and an area ratio of said grain boundary phase in a section of said dielectric layer is 2% or less.

20 12. The multilayer ceramic capacitor as set forth in claim 1, wherein said dielectric particles have a core-shell structure.

25 13. The multilayer ceramic capacitor as set forth in claim 2, wherein said dielectric particles

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have a core-shell structure.

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14. The multilayer ceramic capacitor as set forth in claim 1, wherein said dielectric layer is comprised of dielectric particles, a grain boundary and grain boundary phase, a segregation phase exists in said grain boundary phase, and said segregation phase contains at least two kinds of elements selected from Mn, Y, Si, Ca, V and W.

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15. The multilayer ceramic capacitor as set forth in claim 2, wherein said dielectric layer is comprised of dielectric particles, a grain boundary and grain boundary phase, a segregation phase exists in said grain boundary phase, and said segregation phase contains at least two kinds of elements selected from Mn, Y, Si, Ca, V and W.

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16. A production method of a multilayer ceramic capacitor, comprising the steps of:  
firing a green chip to be a capacitor element body comprising dielectric layers and  
internal electrode layers in a reducing atmosphere;  
and

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performing heat processing under an atmosphere of which oxygen partial pressure is higher than the reducing atmosphere;

wherein:

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an average particle diameter (R), in a direction parallel with the internal electrode layers, in dielectric particles constituting said dielectric layer is made to be larger than a thickness (d) of said dielectric layer.

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17. The production method of a multilayer ceramic capacitor as set forth in claim 16, wherein a temperature of heat processing after firing under said reducing atmosphere is 1000°C or more.

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18. The production method of a multilayer ceramic capacitor as set forth in claim 16, wherein an oxygen partial pressure at the time of heat processing after firing under said reducing atmosphere is  $10^{-3}$  Pa to 1 Pa.

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19. The production method of a multilayer ceramic capacitor as set forth in claim 17, wherein an oxygen partial pressure at the time of heat processing after firing under said reducing atmosphere is  $10^{-3}$  Pa to 1 Pa.

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